# **BDCP Conservation Strategy Subgroup**

Meeting February 26, 2007

#### Preliminary Conceptual Conservation Strategy Alternatives

- Each alternative is based on a different major conservation "theme"
- Combinations of alternatives are anticipated to be needed to constitute a complete strategy for the BDCP.
- Conservation benefits and constraints/issues are preliminary and not comprehensive

# **CSA 1. Operations Modifications with Existing Conveyance Configuration**

- Re-op pumping operations but don't move pumps
- Re-op reservoirs
- No major set-back levees in Delta
- Fix pumping plants and improve salvage
- Opportunistic habitat restoration
- Screening of diversions

# CSA 2. In-Delta Habitat Restoration under Existing Operations

- Major reconfiguration of Delta islands including setback levees and on-island restoration
- Other opportunistic restoration

## CSA 3. Opportunistic Exports with In-Delta Habitat Restoration

- Major increase in pumping capacity and through Delta conveyance capacity to allow opportunistic diversions during high flows, potential reduction in total exports
- Additional south of Delta storage
- Re-operate DCC for ecological benefits
- Major reconfiguration of Delta islands including setback levees/on-island restoration

### CSA 4. South Delta Aqueduct (SDA) with In-Delta Habitat Restoration

- Peripheral aqueduct with discharge into lower San Joaquin River
- Interim in-Delta restoration and system ops
- Modified ops to improve hydrologic conditions
- Post-SDA reconfiguration of the Delta, including setback levees and on-island restoration
- Other opportunistic restoration

### CSA 5. Isolated Facility (IF) with In-Delta Habitat Restoration

- Peripheral aqueduct that isolates CCF, SWP, and CVP pumps
- Interim in-Delta restoration & system operations during IF construction
- Modified operations to mimic natural fluctuating hydrologic conditions after IF construction
- Large-scale reconfiguration of the Delta for ecological benefits, including setback levees and island restoration after IF construction
- Other opportunistic restoration

### CSA 6. Suisun Marsh Habitat Restoration in Combination with In-Delta Restoration

- Conversion of diked wetlands to tidal wetlands
- Removal of salinity control structures
- In-Delta habitat restoration similar to CSA 2, but at a reduced extent because of conservation efforts in Suisun Marsh

### CSA 7. Upstream Habitat Restoration in Combination with In-Delta Restoration

- Habitat restoration and improving passage
- Isolation of captured gravel pits
- Screen diversions
- Modified ops to support in-stream flows and cold water pool management
- In-Delta restoration similar to CSA 2, but reduced because of upstream conservation efforts

# Group Discussion of Conservation Strategy Alternatives

# **Discussion of BDCP Conservation Goals**

#### Planning Agreement: Planning Goals (Section 3) Conservation/Compliance

- Provide for the conservation and management of Covered Species within the Planning Area;
- Preserve, restore and enhance aquatic, riparian and associated terrestrial natural communities and ecosystems that support Covered Species within the Planning Area through conservation partnerships;
- Allow for projects to proceed that restore and protect water supply, water quality, and ecosystem health within a stable regulatory framework;
- Provide a means to implement Covered Activities in a manner that complies with applicable State and federal fish and wildlife protection laws, including CESA and FESA, and other environmental laws, including CEQA and NEPA;

# Planning Agreement Planning Goals (cont.)

- Provide a basis for permits necessary to lawfully take Covered Species;
- Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements for Covered Activities within the planning Area;
- Provide a less costly, more efficient project review process which results in greater conservation values than project-byproject, species-by-species review; and
- Provide clear expectations and regulatory assurances regarding Covered Activities occurring with the Planning Area.

#### Planning Agreement: Preliminary Conservation Objectives (Section 6)

- Provide for the protection of Covered Species and associated natural communities and ecosystems that occur with the Planning Area
- Preserve the diversity of fish, wildlife, plant and natural communities within the Planning Area
- Minimize and mitigate, as appropriate, the take of proposed covered Species
- Preserve and restore habitat and contribute to the recovery of Covered Species
- Reduce the need to list additional species
- Set forth species-specific goals and objectives
- Set forth specific habitat-based goals and objectives
- Implement and an adaptive management and monitoring program to respond to changing ecological conditions
- Avoid Actions that are likely to jeopardize the continued existence of Covered Species or result in the destruction or adverse modification of critical habitat

#### Comparison to Draft Fishery Agency Goals and Objectives for the BDCP

- 1. Achieve Contribute to the recovery conservation of at-risk native species in the Delta and Suisun Bay and tributaries. Primary emphasis will be placed on POD species, anadromous salmonids, and other covered species included in the BDCP.
- 2. Rehabilitate natural processes in the Bay-Delta estuary and its watershed, with minimal human intervention, to support natural Contribute to the rehabilitation of natural ecological processes to support aquatic and associated terrestrial bioticadjacent riparian and floodplain natural communities and habitats, to favor the native covered species of those communities. Primary emphasis will be placed on ecological processes that support POD species, anadromous salmonids, and other species included in the BDCP.

#### Comparison to Draft Fishery Agency Goals and Objectives for the BDCP (cont.)

- 3. Maintain and/or enhance populations of selected species for sustainable commercial and recreational harvest, consistent with the other ERP goals.4. Protect and restore functional habitat types in the Bay-Delta Estuary and its watershed for ecological values. Primary emphasis will be placed on habitats that support POD species, anadromous salmonids, and other covered species included in the BDCP.
- 5. Prevent rthe establishment of 4. Reduce the risk of establishing additional non-native invasive species and reduce the negative ecological impacts of currently established species.
- 6. <u>5.</u> Improve or maintain water and sediment quality conditions that fully to support healthy and diverse ecosystems. Primary emphasis will be placed on conditions that support covered species included in the BDCP.